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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,419	07/01/2003	Jiawei Hu	01263.002318.	9467

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FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER
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STOICA, MARIA

ART UNIT	PAPER NUMBER
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3715

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/609,419

Applicant(s)

HU ET AL.

Examiner

Maria Stoica

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-21, 23-34 and 36-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-21, 23-34 and 36-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5/30/06.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Status of Claims***

1. Claims 7, 22, and 35 have been cancelled. New claims 37-40 and amendments to claims 1, 3, 16, 18, 28, 31-34, and 36 have been entered. Claims 1-6, 8-21, 23-34, and 36-40 are pending.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 31 is rejected under 35 U.S.C. 102(b) as being anticipated by Vogel (US Patent No. 5,963,965). Vogel discloses a user interface comprising topic representation display means arranged to display in a display area a graphical representation of a topic identified in text data (Figure 15), in which graphical representation are distributed visual indicia representing visually to the user the relative positions within the text data of items of context data associated with the identified topic on the basis of the actual positions of the items of context data within the text (i.e., the words are clustered together based on how near to each other they can be found within the text or, in other words, their relative positions to each other within the text, see col. 15, lines 53-62; col. 17, lines 4-19); user input receiving means for receiving user input from a user input

device and for moving the cursor in the display area in accordance with the user input (col. 3, lines 7-10); and modifying means for modifying the graphical topic representation when the cursor is placed over a visual indicia (col. 15, line 56 – col. 16, line 5).

3. Claim 32 is rejected under 35 U.S.C. 102(e) as being anticipated by Cohen et al. (US Patent No. 7,024,658). Cohen discloses a user interface comprising display means arranged to display a display region (106) having first and second display areas adjacent to one another and configured to display in the first display area at least a portion of a text (112) and to display in the second display area a graphical representation of a topic occurring in the text (108) in which graphical representation are distributed visual indicia representing visually to the user context data associated with that topic such that the relative positions within the text data of items of context data associated with the topic are determined by the actual positions of the items of context data associated with the topic are determined by the actual positions of the items of context data within the text (i.e., a tree list structure provides an outline to the text), the display means also being arranged to display a cursor in the display region and a scroll bar associated with the first display area (113); user input means for receiving user input from a user input device and for moving the cursor in the display region in accordance with the user input (col. 1, lines 42-56); and scrolling means for scrolling both the text in the first display area and the topic representation in the second display

area when user input is received by the user input means that causes the cursor to move to input a scroll instruction (Figure 1, col. 1, lines 43-45).

4. Claims 1-2, 4-5, 8-14, 16-17, 19-20, 23-29, 33-34, and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Vogel.

Regarding claims 1, 16, and 33-34 and 36, Vogel discloses an apparatus and method for providing a user with an indication of the content of a text (Abstract), the apparatus and method comprising receiving means for receiving text data (col. 5, lines 26-27), topic determining means for determining from the text data at least one topic (col. 6, lines 14-27; col. 9, lines 27-30), topic context data identifying means for identifying in the text data context data associated with the at least one topic determined by the topic determining means (col. 11, lines 33-36; col. 5, lines 28-30), topic representation data providing means operable to provide topic representation data defining a graphical representation of the at least one topic in which are distributed visual indicia representing at least some of the context data (Figure 15) with the distribution of the visual indicia indicating visually to the user the relative positions within the text data of the corresponding items of context data on the basis of the actual positions of the items of context data within the text as determined by their position within the text (i.e., the words are clustered together based on how near to each other they can be found within the text or, in other words, their relative positions to each other within the text, see col. 15, lines 53-62; col. 17, lines 4-19), and supplying means for supplying the topic representation data for enabling display of the at least one topic

representation to a user (col. 11, lines 27-28). Vogel further discloses topic context data position determining means for determining, for each item of context data, the actual position of that item of context data within the text (col. 18, lines 10-13 and 20-34). More specifically, the system is intended to search through a large database of textual data. Since this data is indexed for searching, it is inherent to the invention that the indexing of the keywords must be related back to the location of the words within the text so as to allow the user to access the textual data desired for reference as, by convention, this is how a search engine works.

Regarding claims 2 and 17, Vogel discloses an apparatus and method, further comprising significance determining means for determining the relative significance of context data associated with the at least one topic, wherein the topic representation data providing means arranged to provide a graphical representation that provides a visual indication of the relative significance of occurrence of the context data (col. 15, lines 54-66).

Regarding claims 4 and 19, Vogel discloses that the topic representation data providing means is arranged to provide topic representation data comprising data that determines the appearance of the visual indicia in accordance with the relative significance of the context data (col. 13, lines 3-7).

Regarding claims 5 and 20, Vogel discloses that the significance determining means is arranged to determine the significance of context data in accordance with at least one of frequency of occurrence in the text data, position of occurrence in the text data and its appearance within the text data (col. 12, lines 60-65).

Regarding claims 8 and 23, Vogel discloses that the topic representation data providing means is arranged to provide topic representation data wherein the scale of distribution of the visual indicia is non-linear and is relatively enlarged in at least one of the following situations: where the visual indicia are close together; and where the visual indicia are more significant (col. 16, lines 48-51).

Regarding claims 9 and 24, Vogel discloses selection means for enabling a user to select visual indicia (col. 17, lines 65-67), and highlighting means for causing any other visual indicia associated with the same context data as the selected visual indicia to be highlighted (col. 17, line 65-col. 18, line 5 and Figure 17).

Regarding claims 10 and 25, Vogel discloses modifying means for modifying the visual indicia of a topic representation (col. 5, lines 39-42).

Regarding claims 11 and 26, Vogel discloses that the topic determining means is arranged to determine a number of different topics from the text data (col. 13, lines 11-21); the topic context data identifying means is arranged to identify in the text data respective context data for each topic (col. 13, lines 31-40); and the topic representation data providing means is arranged to provide topic representation data defining a respective graphical representation for each topic (col. 16, lines 6-8).

Regarding claims 12 and 27, Vogel discloses that the topic determining means is arranged to determine from the text data at least one of the number of occurrences of the same lexical item and the number of occurrences of lexical items sharing a relationship and defining a lexical item set to identify the topic or topics in accordance with the highest such occurrences (col. 14, lines 7-15).

Regarding claims 13 and 28, Vogel discloses that the topic determining means is arranged to determine from the text data at least one of the number of occurrences of the same noun and the number of occurrences of nouns sharing a relationship and defining a noun set to identify the topic or topics in accordance with the highest such occurrences (col. 13, lines 9-14, 40-46; col. 14, lines 8-26, 37-41).

Regarding claims 14 and 29, Vogel discloses that the topic determining means is arranged to identify lexical chains in the phrase-identified text data and to identify as the topic or topics the lexical chain or chains having the highest number of components (col. 13, lines 40+).

Regarding claims 37 and 39, the relationship described by Vogel is a type of linear relationship. Based on the description of the invention as provided above, Vogel discloses that the words clustered at different levels are connected by lines, and each level indicates a linear distance level between the words—the farther apart the words are found in the document, the higher the cluster in which they are linked together.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Batchilo et al. (US Patent Application Publication 2003/0130837) in view of Kupiec (US



Patent No. 6,533,822). Batchilo discloses an apparatus and method for providing a user with an indication of the content of a text (Abstract), the apparatus comprising: a part-of-speech associator for associating words in text data with part-of-speech identifiers to produce part-of-speech identified text data (p. 3, par. 45); a topic determiner for determining from the part-of-speech-identified text data at least one topic that occurs in the text data (p. 3, par. 46; p. 2, par. 17); a topic context data identifier for identifying in the text data context data associated with the at least one topic determined by the topic determiner (p. 7, pars. 183-184); a topic representation data provider arranged to provide topic representation data defining a graphical representation of the topic in which are distributed visual indicia representing at least some of the context data with the distribution of the visual indicia indicating visually to the user the relative positions within the text data of the corresponding items of context data on the basis of the actual positions of the items of context data within the text as determined by their position in the text (i.e., the words are organized in a tree structure that outlines the organization of the document, see Figure 10); and a display controller for causing a display to display the topic representation (inherent from Figures 9 & 10). Batchilo does not expressly disclose a topic context data position determiner for determining the actual position of each item of context data identified. However, Kupiec discloses a summarization apparatus that lets a user browse through textual data by providing topic summary portions for sections of the textual data (Figure 4) and indexing the topics by their location within the text document (col. 7, lines 1-9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the feature

of indexing the content keywords along with their location in the original textual data in order to allow the user to easily access the desired textual data without having to visually scan the entire document to find desired information.

6. Claims 6 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vogel in view of Rose et al. (US Patent No. 5,838,323). Vogel discloses that the representative data should be graphically represented as a map. However, Vogel does not expressly disclose that the map be linear. Rose teaches that the topic representation data-providing means is arranged to provide topic representation data that defines the graphical representation as a line along which the visual indicia are distributed (see Figure 2). It would have been obvious to one of ordinary skill in the art at the time of invention to linearize the map representation of Vogel, as taught by Rose, in order to provide an ordered condensation representation of the content of a piece of text that is more easy to follow visually.

7. Claims 15, 30, 38, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vogel in view of Kupiec.

Regarding claims 15 and 30, Vogel does not expressly disclose that the text in accordance with the keyword(s) selected is displayed as a summary. However, Kupiec teaches this aspect (Abstract). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teaching of Kupiec into the method and apparatus of Vogel in order to provide the user with a truncated version of the text

containing the keywords in order to make it easier for the user to skim through the portions of text containing the keywords searched by the user.

Regarding claims 38 and 40, Kupiec discloses that the actual position is determined based on the number of words from the start of the word to an item of context data. This is inherent from the fact that the context of each area of the text is provided in order on a 'summary' page, the order determined by the location of each paragraph in the original document (Figures 4 and 5).

### ***Response to Arguments***

8. Applicant's arguments with respect to claims 1-6, 8-21, 23-34, and 36-40 have been fully considered but are not persuasive.

Applicant argues that Vogel does not disclose that the exact position of an item is determined within the text or that the system visually indicates to the user the relative positions within the text of the context data items. However, as Applicant has quoted, Vogel discloses that if two words are likely to be found together within the text, they are clustered together (p. 20-21 of Applicant's Remarks). Hence, Vogel does cluster words together based on their relative distances from each other, and does present them to the user with an indication of which words are found in proximity of each other (e.g., based on the different levels of maps presented, as well as on the links between clusters). Furthermore, as described in the rejection above, since the maps disclosed by Vogel act as an index, by definition, the exact position of the items is determined in the process of creating the maps.

Applicant argues that Batchillo does not disclose the features of claims 3 and 18 as presented by amendment. A new rejection has been provided above to address the amended features, and therefore Applicant's arguments in this respect have been considered but are moot with respect to the new grounds for rejection.

Applicant argues that Rose does not disclose displaying a graphical representation of a topic occurring in text where the representation indicates relative positions of context data with respect to their location in the actual text. However, Rose is not used to disclose or teach this feature in the rejections presented.

9. The amendments to the specification have been entered and are sufficient to overcome the objections.

10. The 35 U.S.C. 101 rejections with respect to claims 31-34 have been withdrawn.

### ***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maria Stoica whose telephone number is (571) 272-5564. The examiner can normally be reached on M-F: 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Olszewski can be reached on (571) 272-6788. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MS  
8/2/06

*Kathleen Mosser*  
KATHLEEN MOSSER  
PRIMARY EXAMINER